

75, it is said of *Dictyuchus*: "This genus of the Saprolegniaceae contains the only parasite genus in the first two families." Turning then to the end of the book, we find sprodochium for sporodochium on page 664, "synnema or corymium" for *coremium* on page 565, while *synema* appears on page 694 of the glossary, and on page 443 Merasmieae appears instead of Marasmieae.

In several points STEVENS helps to overcome inconsistencies which are common in works on parasitic fungi. Striking among these is his listing of the three groups of Fungi Imperfecti (the group which is characterized chiefly by the imperfection of our knowledge of them) in the three orders Sphaeropsidales, Melanconiales, and Moniliales, rather than Sphaeropsidales, Melanconiales, and Hyphomycetes. In this connection it is unfortunate that he should speak of the types of *fructification* displayed by Fungi Imperfecti as pycnidia, acervuli, and hyphae, in spite of the fact that the definition of hypha in the glossary is "the thread-like *vegetative* part of a fungus."

Altogether this book, with its concise, clear keys of parasitic fungi, which aims to give at least one illustration as well as description of each genus of economic importance in the United States, and which has a comprehensive bibliography, must prove a stimulus to the student of plant pathology.—

WANDA M. PFEIFFER.

NOTES FOR STUDENTS

Current taxonomic literature.—H. ANDRES (Verhandl. Bot. Ver. Prov. Brandbg. 54:218-227. 1913) has published two species of *Pyrola*, one being from the state of Washington, and (Oesterreich. Bot. Zeitschr. 63:68-75. 1913) three species are added from the Pacific Coast. The same author (Allg. Bot. Zeitschr. 19:81-86. 1913) in a closing article on the Pyrolaceae includes the description of a new species (*P. cordata*) from Ontario, Canada.—H. H. BARTLETT (Rhodora 15:81-85. 1913) in continuation of systematic studies on *Oenothera* has published jointly with G. F. ATKINSON two new species of this genus from New York.—O. BECCARI (Webbia 4:143-240. 1913) under the title "Contributi alla conoscenza delle Palme" has published the results of further studies of the palms, describes a new genus (*Jubaeopsis*) from Central Africa, and gives a revision of the genus *Pritchardia* which includes several new species from the Hawaiian Islands.—G. BITTER (Rep. Sp. Nov. 12:49-90, 136-162. pls. 1, 2. 1913) has published upward of 50 new species and several varieties of *Solanum* mostly from America.—S. F. BLAKE (Rhodora 15:86-88. 1913) records two new forms of *Ophioglossum vulgatum* from eastern North America, and (*ibid.* 153-168) under the title of "Six weeks' botanizing in Vermont. I. Notes on the plants of the Burlington region" presents the results of a study of the plants collected in the Champlain Valley of Vermont in 1911, adding several species not hitherto recorded from the Burlington region and describes a number of new varieties and forms.—C. BÖRNER (Abh. Nat. Ver. Bremen 21:245-282. 1913) under the title "Botanisch-systematische Notizen" has

proposed several new generic names for somewhat aberrant or habitally distinct forms of well known genera. The names are numerous and attention is called merely to their place of publication.—E. BRAINERD (Bull. Torr. Bot. Club 40:249-260. pls. 15-17. 1913) describes four new hybrid violets; and (Rhodora 15:106-111. pl. 104. 1913) in continuation of his studies on the violets presents a discussion on the Old World *Viola arenaria* DC. in relation to its American ally and characterizes a new variety, namely, *V. adunca* var. *glabra*. The same author (*ibid.* 112-115) under "Notes on new or rare violets of Northwestern America" describes a new variety of *V. cucullata* Ait. and adds several new hybrid combinations.—A. BRAND (Ann. Conserv. and Jard. Bot. Genève 15 and 16:322-342. 1913) in continuation of studies on the Polemoniaceae records further information on this family and describes several new species and varieties from western United States, and (*ibid.* 343-344) publishes two new species of *Symplocos* from America.—T. S. BRANDEGEE (Univ. Calif. Pub. Botany 4:375-388. 1913) has published 35 new species, based on collections made in Mexico by Dr. C. A. PURPUS in 1912.—N. L. BRITTON (Torreya 13:215-217. 1913) describes 4 new species of Cyperaceae from the West Indies.—N. L. BRITTON and J. N. ROSE (Contr. U.S. Nat. Herb. 16:239-242. pls. 66-73. 1913) in continuation of their studies in the Cactaceae have described from living specimens 7 new species from Mexico and Central America. The same authors (*ibid.* 255-262. pls. 78-84) under the title "The genus *Epiphyllum* and its allies" present a systematic treatment of *Epiphyllum*, to which *Phyllocactus* Link is referred as a synonym, and the immediately allied genera, as follows: *Epiphyllum* (28), *Disocactus* (2), *Zygocactus* (3), *Schlumbergera* (2), *Wittia* (3), and *Epiphyllanthus* (1); *Eccremocactus* and *Strophocactus*, each represented by a single species, are proposed as new generic types.—L. BUSCALIONI and G. MUSCATELLO (Malpighia 25:187-250. 1912) under the title "Studio monografico sulle specie americane del gen. *Saurauia* Willd." give a synoptical revision of the genus and include descriptions of two new species from South America, and (*ibid.* 389-436. pls. 7, 8) in continuation of these studies add two more species of *Saurauia* from Mexico.—F. E. CLEMENTS, C. O. ROSENDAHL, and F. K. BUTTERS (Geol. and Nat. Hist. Surv. Minn., Minn. Bot. Studies. pp. ix+59. 1913) have issued the third edition of their "Guide to the spring flowers of Minnesota, field and garden."—O. F. COOK (Contr. U.S. Nat. Herb. 16:243-254. pls. 74-77. 1913) presents a discussion of the false date palm (*Pseudophoenix Sargentii* Wendl.) and creates for it an independent family, namely *Pseudophoenicaceae*. In an accompanying key to the families of American palms the new family is placed between the *Ceroxylaceae* and the *Cocaceae*.—L. DAMAZIO (Broteria Ser. Bot. 11:51-53. 1913) describes and illustrates a new species of *Cassia* (*C. itaculumiensis*) from Brazil.—H. DIEDICKE (Ann. Mycol. 11:172-184. 1913) under the title "Die Leptostromaceen" describes two new genera, namely, *Pycnothyrium* found on leaves of *Mercurialis perennis* and *Thyriostroma* on *Pteris aquilina*.—A. D. E. ELMER (Leaf. Phil. Bot. 5:1589-1750. 1913) in cooperation with several

specialists has issued articles 78-92 inclusive of the *Leaflets*. About 120 new species and varieties of Philippine plants are described.—F. FEDDE (Rep. Sp. Nov. 12:278-279. 1913) records a new species and variety of *Corydalis* from Idaho.—M. L. FERNALD (Rhodora 15:74-78, 92, 93, 168, 169. 1913) has published new varieties in *Bidens*, *Carex*, and *Betula*.—M. L. FERNALD and K. M. WIEGAND (*ibid.* 133, 134) characterize two new varieties of *Carex* from Newfoundland and (*ibid.* 135, 136) a new form of *Calamagrostis Pickeringii* Gray.—C. N. FORBES (Occ. Papers Bern. Pau. Bishop Mus. Eth. and Nat. Hist. 5:3-26. 1913) places on record notes concerning the flora of the Hawaiian Islands and describes a new species of *Euphorbia* (*E. Stokesii*).—E. GADECEAU and O. STAPF (Rev. Hort. Paris 85:422-426. 1913) describe and illustrate a new species of *Mandevillea* (*M. Tweedieana*) indigenous to South America.—L. GAIN (Deuxième Expédition Antarctique Française, 1908-1910, commandée par le J. CHARCOT, pp. 218. pls. 1-8. 1912) records the results of a study of the algae secured on the expedition and describes several species new to science.—H. A. GLEASON (Bull. Torr. Bot. Club 40:305-332. 1913) in continuation of studies on the *Vernonieae* has published several new species and gives a synopsis of the group as represented in the West Indies.—A. GRIFFINI (Atti Soc. Ital. Sc. Nat. Milano 52:61-104. 1913) under the title "Sopra alcuni Grillacridi e Stenopelmatidi della collezione Pantel" includes the description of a new genus (*Paterdecolyus*) from India. The new genus is related to *Anabropsis*.—D. GRIFFITH (Monatsschrift für Kakteenkunde 23:130-140. 1913) describes several new species of *Opuntia* and a new *Nopalea* from Southwestern United States and Mexico.—H. GROSS (Bull. Geogr. Bot. 23:7-32. 1913) under the title "Remarques sur les Polygonées de l'Asie orientale" presents a synopsis of the genera of this family, as represented in eastern China, describes several new species and one new genus (*Pleuropteropyrum*).—H. E. HASSE (Contr. U.S. Nat. Herb. 17:1-132. 1913) has published a "Lichen flora of Southern California." The region covered by the author is that portion of California south of the 36° parallel or about one-third of the state. Five families of lichens are recognized embracing 60 genera and approximately 360 species.—E. HASSLER (Rep. Sp. Nov. 12:201, 202, 249-278. 1913) describes about 75 new species, belonging mostly to the Apocynaceae, Malvaceae, and Onagraceae, from Argentina and Paraguay. One new genus is characterized, namely, *Casimirella* of the Icacinaceae.—A. HEIMERL (Oesterr. Bot. Zeitschr. 63:279-290. 1913) under the title "Die Nyctaginaceen-Gattungen *Calpidia* und *Rockia*" revives *Calpidia* Thour. and proposes a new genus (*Rockia*) based on *Pisonia sandwichensis* Hillebr. The same author (*ibid.* 353-356) has published a new species of *Selinocarpus* (*S. Purpusianus*) from Mexico.—A. A. HELLER (*Muhlenbergia* 9:60-65. 1913) in an article entitled "Acmispon in California" recognizes 6 species of this genus, 4 of which are described as new to science. The same author (*ibid.* 67, 68) makes 23 new combinations in the Leguminosae, Onagraceae, and Ericaceae.—G. HINZE (Ber. Deutsch. Bot. Gesells. 31:189-202. pl. 9. 1913) under the title "Beiträge zur Kenntnis der

farblosen Schwefelbakterien" proposes a new genus (*Thiovulum*) from the Gulf of Naples.—A. KORSCHIKOFF (*ibid.* 174-183. *pl.* 8. 1913) describes and illustrates a new genus (*Spermatozopsis*) of the Volvocales.—B. KOSOPOLJANSKY (Jour. Russe de Bot. no. 1-2. pp. 1-10. *pls.* 1-5. 1913) under the title "Species Umbelliferarum minus cognitae" has published several new species of Umbelliferae and includes a new genus (*Glochidopleurum*) based on *Bupleurum Sintenisii* Aschers. and Graeb.—F. KRÄNZLIN (Ann. K.K. Naturhist. Hofmus. Wien 27:109-112. 1913) has published 5 new species of *Spiranthes* from South America.—K. KRAUSE (Smith. Misc. Coll. 61: no. 16. p. 1. 1913) describes a new species of *Esenbeckia* (*E. Pittieri*) from Colombia.—G. KÜKENTHAL (Rep. Sp. Nov. 12:91-95. 1913) under the title "Cyperaceae novae III" has published several new species and varieties including 4 from South America.—C. LAUTERBACH (Bot. Jahrb. 50:1-170. 1913) in cooperation with certain specialists has issued the second article under the general title "Beiträge zur Flora von Papuasien." Several species new to science are recorded and the following new genera are proposed: *Mischocodon* Radlk. of the Sapindaceae, *Astelma* Schltr. of the Asclepiadaceae, *Ancylacanthus* and *Jadunia* Lindau of the Acanthaceae.—R. LAUTERBORN (Allg. Bot. Zeitschr. 19:97-100. 1913) under the title "Zur Kenntnis einiger sapropelischer Schizomyceten" characterizes the following new genera: *Pelodictyon*, *Schmidlea*, *Pelogloea*, and *Peloploca*.—H. LÉVEILLÉ (Rep. Sp. Nov. 12:99-103. 1913) has published several new species of flowering plants from Asia and includes a new genus (*Bodinieriella*) of the Ericaceae.—G. LINDAU (Ber. Deutsch. Bot. Gesells. 31:243-248. *pl.* 11. 1913) publishes an account of a new fungus to which he gives the name *Medusomyces Gisevii*. The new genus is related to *Mycoderma*.—T. LOESENER (Rep. Sp. Nov. 12:217-244. 1913) in cooperation with several specialists under the heading "Mexikanische und zentralamerikanische Novitäten IV" has published several new species of flowering plants.—FR. MARIE-VICTORIN (Le Naturaliste Canadien 39:177-189. 1913) under "Notes sur deux cas d'hybridisme naturel" treats *Nymphaea rubrodisca* (Morong) Greene as a hybrid between *N. americana* (Prov.) Miller and Standley and *N. microphylla* Pers., and records a new hybrid between *Lysimachia terrestris* (L.) B.S.P. and *L. thyrsiflora* L.—A. MAUBLAN (Bol. Minist. Agr. Ind. and Com. Rio de Janeiro 2:126-130. 1913) in a paper entitled "Uma molestia do mamoeiro" describes and illustrates a new fungus (*Sphaerella Caricae*) found on leaves of the pawpaw (*Carica Papaya* L.) and proposes a new generic name (*Asperisporium*) based on *Fusicladium Peucedani* Ell. & Holw.—W. R. MAXON (Smiths. Misc. Coll. 61: no. 4. pp. 1-5. *pls.* 1, 2. 1913) describes and illustrates a new genus of ferns (*Saffordia*) from Peru. The same author (Contr. U.S. Nat. Herb. 17:133-179. *pls.* 1-10. 1913) under the title "Studies of tropical American ferns no. 4" has published a paper embodying results of a continued study of ferns and fern-allies, recording important data and describing new species in *Asplenium*, *Dicksonia*, *Odontosoria*, *Bommeria*, *Hemionitis*, *Lycopodium*, and *Cyathea*.—N. NAOUMOFF (Bull. Soc. Mycol.

France 29:273-278. *pl.* 13. 1913) under the heading "Matériaux pour la flore mycologique de la Russie" includes the description of a new genus (*Rhodoseptoria*) found on leaves and fruit of *Prunus*.—B. NĚMEC (Rozpravy České Akademie 21:1-16. *pls.* 1, 2. 1912) describes and illustrates a new genus and species (*Anisomyxa Plantaginis*) parasitic on *Plantago lanceolata*.—J. A. NIEUWLAND (Am. Mid. Nat. 3:85-91. *pl.* 2. 1913) has published a new species of violet (*Viola candidula*) from Michigan.—S. B. PARISH (Bot. Gaz. 55:300-313. 1913) under the title of "California Paroselas" recognizes 9 species and several varieties of this genus indigenous to California. The same author (*Muhlenbergia* 9:57-59. 1913) in an article entitled "Additions to the known flora of southern California" places on record important data concerning that flora and describes a new species of *Atriplex* (*A. saltonensis*) from the Colorado Desert.—F. W. PENNELL (Bull. Torr. Bot. Club 40:401-439. 1913) gives a synoptical revision of the *Agalinanae*, recognizing four genera, namely *Macranthera*, *Afzelia*, *Aureolaria*, and *Agalinis*. Descriptions of several new species are included.—C. A. PICQUENARD (Trav. du Lab. de Concarneau 4: fasc. 3. pp. 1-5. *pl.* 1. 1912) has proposed a new genus (*Guerinea*) based on *Hapalidium callithamnoides* Crouan.—R. PILGER (Bot. Jahrb. 50:171-287. 1913) in continuation of monographic studies of the Plantaginaceae gives a detailed consideration of the section *Novorobis* of *Plantago*, recognizing 50 species of which nearly one-third are new to science. The same author (Rep. Sp. Nov. 12:304-308. 1913) has published 6 new species of grasses from Patagonia and Tierra del Fuego.—L. QUEHL (Monats. für Kakteenkunde 22:42. 1913) describes a new species of *Mamillaria* (*M. echinoidea*) from Mexico.—H. REHM (Ann. Mycol. 11:166-171. 1913) characterizes a new ascomycetous genus (*Durandia*) based on *Sphaerographium Fraxini* (Peck) Sacc.—H. N. RIDLEY (Jour. Bot. 51:201, 202. *pl.* 527. 1913) has published a new genus (*Aridarum*) of the Araceae from Borneo.—W. J. ROBINSON (Bull. Torr. Bot. Club 40:193-228. *pls.* 9-12. 1913) under the title of "A taxonomic study of the Pteridophyta of the Hawaiian Islands III" presents a synoptical treatment of several genera and includes descriptions of new species in *Polypodium* and *Asplenium*.—R. A. ROLFE (Bot. Mag. t. 8514. 1913) describes and illustrates a new orchid (*Catasetum microglossum*) from Peru.—J. N. ROSE (Smiths. Misc. Coll. 61: no. 12. pp. 1, 2. *pl.* 1. 1913) describes and illustrates a new poplar (*Populus MacDougalii*) from the Salton Basin, California.—P. A. RYDBERG (Bull. Torr. Bot. Club 40:461-485. 1913) under the title "Studies on the Rocky Mountain flora XXIX" describes several new species of Sympetalae.—R. SCHLECHTER (Rep. Sp. Nov. 12:104-109, 202-206, 212-216. 1913) in continuation of his work on orchids has published upward of 20 new species from tropical America. One new genus (*Ischnogyne*) from the mountains of Szechuan, China, is included.—C. W. SHANNON (Okl. Geol. Surv. no. 4. pp. 41. 1913) has issued a list of the trees and shrubs of Oklahoma.—J. K. SMALL (Torreya 13:77. 1913) describes a new species of *Malpighia* (*M. Harrisii*) from Jamaica.—J. D. SMITH (Bot. Gaz. 55:431-438. 1913) presents

his 36th paper, as a result of continued study on the flora of Central America. The article includes descriptions of 12 species of flowering plants new to science.—J. D. SMITH and J. N. ROSE (Contr. U.S. Nat. Herb. 16:287-298. 1913) have published a "Monograph of the Hauyae and Gongylocarpeae, tribes of Onagraceae." The study embraces 4 genera and 14 species; two new generic names are proposed, namely, *Xylonagra*, based on *Oenothera arborea* Kellogg, and *Burragea*, based on *Gaura fruticulosa* Benth.—W. W. SMITH (Rec. Bot. Surv. India 4:324-431. 1913) records the results of a botanical survey of Southeast Sikkim, India, lists 925 species, and describes a new genus (*Paroxygraphis*) of the Ranunculaceae.—C. SPEGAZZINI (Ann. Mus. Nac. Buenos Aires 23:167-244. 1912) in an article on the Laboulbeniaceae of Argentina has published several new species and proposes two new genera, namely, *Cochliomyces* and *Laboulbeniella*. The same author (*ibid.* 1-146) under the title "Mycetes Argentinenses" continues the enumeration of the Mycetes of Argentina, adds several species new to science, and proposes the following new genera: *Eudimeriolum*, *Winteromyces*, *Trichospermella*, *Dasysphaeria*, *Criserosphaeria*, *Hormopeltis*, *Polhysterium*, *Symphaeophyma*, *Apiosporella*, *Ectosticta*, *Dasyticta*, *Dasyprena*, *Phaeopolynema*, and *Phaeolabrella*.—A. STEWARD (Proc. Calif. Acad. Sci. 1:431-446. 1912) records the lichens found on the Expedition of the California Academy of Sciences to the Galapagos Islands in 1905-1906. Sixteen species were found which were not before reported from the islands.—H. and P. SYDOW (Ann. Mycol. 11:93-118. 1913) have published several new species of fungi from northern Japan and characterize a new genus (*Miyagia*) of the Pucciniaceae found on leaves of *Anaphalis margaritacea*. The same authors (*ibid.* 254-271) under the title "Novae fungorum species X" have published several species new to science and propose the following new genera: *Aithaloderma*, *Schizochora*, *Cyclodothis*, and *Diedickeia* from the Philippine Islands, *Astrosphaeriella* and *Coccidophthora* from Japan, and *Nematostigma* from South Africa.—C. TORREND (Broteria, Ser. Bot. 11:73-98. 1913) under the title "Les Basidiomycetes des environs de Lisbonne et de la région de S. Fiel (Beira Baixa)" includes the descriptions of several new species and proposes one new genus, namely, *Lycoperdellon*, based on *Lycogala Torrendii* Bres.—I. URBAN (Bot. Jahrb. 50: Beibl. III. pp. 1-108. 1913) under the title "Plantae novae andinae imprimis Weberbauerianae VI" in cooperation with several specialists has published an important paper on the Andean flora. About 125 species new to science are described.—H. F. WERNHAM (Jour. Bot. 51:218-221. 1913) has published 11 new species of Rubiaceae from tropical America.—R. S. WILLIAMS (Bryologist 16:36-39. pl. 4. 1913) reports *Brachymenium macrocarpum* Card. from Florida and describes a new species of *Funaria* (*F. rubiginosa*) from Montana.—J. M. GREENMAN.

Metabolism of fungi.—Believing that methods based on a determination of the yield, or of the economic or the respiratory coefficients do not give a satisfactory quantitative representation of the manner of utilization of carbon